

Section 1-6

Choosing a Good Display

Warm-up

You have the following points: A (-2, 3), B (3, -2), and C (4, 4). Find the slopes of each of the possible lines.

 \overleftrightarrow{AB}

-1

 \overleftrightarrow{AC}

1/6

 \overleftrightarrow{BC}

6

Time-series data: Gives data spread out over time

Scatterplot: A graph that is made up of a collection of points that are not connected

Line Graph: A graph where points are connected by line segments

Average Rate of Change: A comparison between two values; compares the change between two points

Slope: Another word for the average rate of change

$$m = \frac{(y_2 - y_1)}{(x_2 - x_1)}$$

Example 1

Consider the prices of gold in dollars/fine oz between 1975 and 1995.

Year	1975	1980	1985	1990	1991	1993	1995
Price	161	613	318	385	363	361	385

Calculate the average rate of change in the price of gold in the following time intervals:

Between 1985
and 1990

13.4 dollars per fine oz

Between 1990
and 1995

0 dollars per fine oz

Create a scatterplot and a line graph

Let's make a scatterplot of the data in our
graphing calculators, then turn it into a
line graph

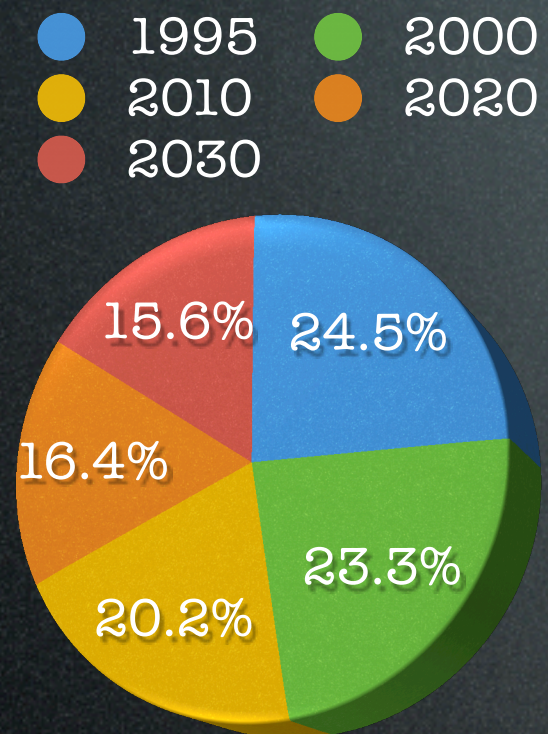
Example 2

Some new faucets, shower heads, and toilets use less water than old ones. Due to the U.S. Energy Policy Act of 1992, the amount of water used by these fixtures was expected to change as follows:

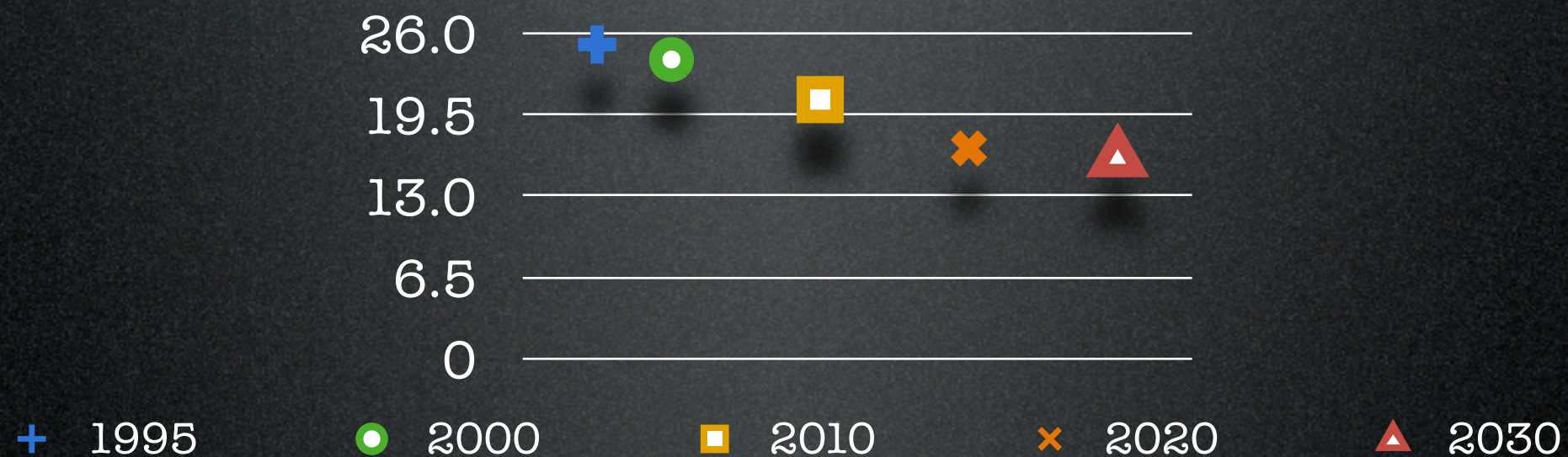
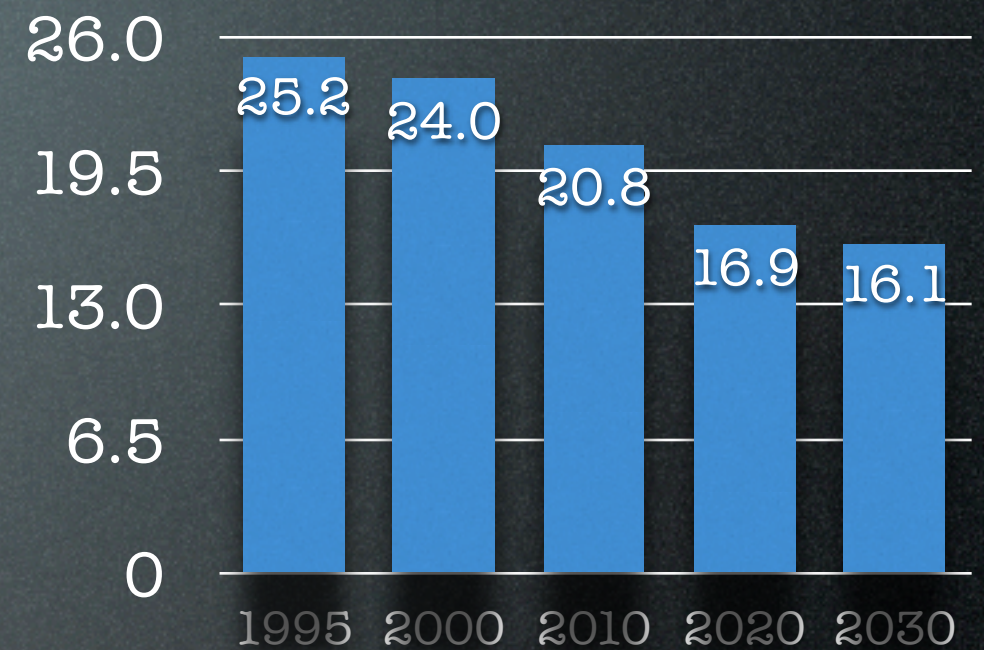
Year	1995	2000	2010	2020	2030
Water use (billion cubic meters)	25.2	24.0	20.8	16.9	16.1

Indicate whether you believe each of the following would be a good graph and support your answer.

a. Circle Graph



b. Bar Graph



c. Coordinate Graph

Homework

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